

REMARKS/ARGUMENTS

In the Office Action mailed January 31, 2008, claims 1-12 were rejected. Additionally, the drawings were objected to. In response, Applicant hereby requests reconsideration of the application in view of the amendments and the below-provided remarks.

For reference, claim 1 is amended to add the limitation "wherein the adaptive filter (30) has a first passband (22,24) during the transmit mode and a second passband (20) during the receive mode." This limitation is taken from dependent claim 4, which is canceled in this response. Claim 5, formerly depending from canceled claim 4, is amended to depend from claim 1.

As a preliminary matter, in the Office Action mailed January 21, 2008, the Examiner did not attach an initialed copy of the Non-Patent Literature Documents section of PTO-1449 form references that were submitted to the USPTO on January 19, 2006. The Examiner also did not indicate the Non-Patent Literature Documents section references on the PTO-1449 form(s) were not in conformance with MPEP § 609. As such, applicant respectfully requests that the Examiner indicate that these references have been considered and made of record.

Objections to the Drawings

The current application is a U.S. National Stage application. The drawing requirements for U.S. National Stage applications are identified in MPEP 1825 and labeling of figures as "Prior Art" is not required (see PCT Rule 11.11). Further, MPEP 1893.03(f) states that "[t]he USPTO may not impose requirements beyond those imposed by the Patent Cooperation Treaty (e.g., PCT Rule 11)." In view of the above, Applicant respectfully asserts that labeling Figure 1 as "Prior Art" is not required in the current application.

Claim Rejections under 35 U.S.C. 102

Claims 1-12 were rejected under 35 U.S.C. 102(e) as being anticipated by Kodim (U.S. Pat. No. 7,005,940, hereinafter Kodim). However, Applicant respectfully submits that these claims are patentable over Kodim for the reasons provided below.

Independent Claim 1

Claim 1 recites an adaptive filter having “a first passband (22,24) during the transmit mode and a second passband (20) during the receive mode” (emphasis added). In contrast, Kodim does not disclose a single filter having two passbands, one operative during the transmit mode, and another operative during the receive mode.

The Office Action, in relation to the rejection of claim 4, states that “Kodim further discloses the adaptive filter (30) has a first passband during the transmit mode **(transmit GSM 1800/GSM 1900 mode and transmit GSM 900 mode as disclosed in col.8, lines 20-25)**” (emphasis in original). Column 8, lines 20-25 of Kodim, however, consist entirely of a table showing the operational modes of an antenna switch. Specifically, they show the position of two switches, D1 and D2, when either of the two transmitters are transmitting or when a receiver is receiving. The cited segment, referring to the transmit GSM 1800/GSM 1900 mode and the transmit GSM 900 mode, simply indicates that the transmitters operate in these frequencies. The cited segment does not disclose an adaptive filter having two passbands.

Kodim does disclose fixed, low-pass filters 40, 42 coupled to individual transmission sources. Kodim describes these filters as “reduc[ing] the level of spurious transmitter signals at harmonic frequencies.” Kodim, column 7, lines 26-27. Kodim gives no indication that either of these filters is anything other than a simple, low-pass filter with a fixed frequency response. The passband of each of these filters is constant, regardless of the mode. Thus, the description of these low-pass filters does not disclose a single adaptive filter having two passbands, with the operative passband dependent upon the mode.

Furthermore, Kodim does not disclose either of the filters as having a passband operative during a receive mode. Thus, the description of these filters also fails to disclose an adaptive filter with a second passband during a receive mode.

For the reasons presented above, Kodim does not disclose all of the limitations of the claim because Kodim does not disclose an adaptive filter having two passbands, one operative during the transmit mode, and another operative during the receive mode, as

recited in the claim. Accordingly, Applicant respectfully asserts claim 1 is patentable over Kodim because Kodim does not disclose all of the limitations of the claim.

Dependent Claims 2-3 and 5-12

Claims 2-3 and 5-12 depend from and incorporate all of the limitations of independent claim 1. Applicant respectfully asserts claims 2-3 and 5-12 are allowable based on an allowable base claim. Additionally, each of claims 2-3 and 5-12 may be allowable for further reasons, as described below.

In regard to claim 5, Applicant respectfully submits that claim 5 is patentable over Kodim because the reference does not disclose all of the limitations of the claim. Claim 5 recites “the first passband (22,24) is a band-pass passband and the second passband (20) is a high-pass passband” (emphasis added). In contrast, the cited portion of Kodim (col. 8, lines 20-25) merely discloses the positions of two switches, D1 and D2, during the various transmit and receive stages.

A band-pass filter is a device that has both an upper cutoff frequency and a lower cutoff frequency. The fixed, low-pass filters 40, 42 connected to the transmitters described by Kodim are not band-pass filters. Rather, they are low-pass filters that have only an upper cutoff frequency. Since the fixed, low-pass filters 40, 42 of Kodim do not have an upper cutoff frequency, neither of the low-pass filters is a band-pass filter as recited in claim 5, and Kodim fails to disclose a limitation of claim 5.

Similarly, Kodim does not describe a high-pass passband filter operative during the receive mode. Indeed, Kodim does not describe a filter having a lower cutoff frequency at any point. Since Kodim does not describe a high-pass passband filter operative during the receive mode, Kodim fails to disclose a limitation of claim 5.

Therefore, Kodim does not disclose an adaptive filter having a band-pass passband during the transmit mode. Kodim also does not disclose an adaptive filter having a high-pass passband filter during the receive mode. Each of these limitations is found in claim 5. Accordingly, Applicant respectfully asserts that claim 5 is patentable over Kodim because Kodim does not disclose “the first passband (22,24) is a band-pass passband and the second passband (20) is a high-pass passband” as recited in claim 5.

In regard to claim 8, Applicant respectfully submits that claim 8 is also patentable over Kodim because the reference does not disclose all of the limitations of the claim. Claim 8 recites “the low-power switch device is a low-power pHEMT or a MEMS.” In contrast, the cited portion of Kodim (col. 6, lines 1-17) merely discloses a microwave monolithic integrated circuit (MMIC) device. However, Kodim does not disclose the use of a pHEMT or a MEMS. Accordingly, Applicant respectfully asserts that claim 8 is patentable over Kodim because Kodim does not disclose “the low-power switch device is a low-power pHEMT or a MEMS” as recited in claim 8.

In regard to claim 9, Applicant respectfully submits that claim 9 is also patentable over Kodim because the reference does not disclose all of the limitations of the claim. Claim 9 recites “wherein the adaptive filter (30) is further arranged to provide electrostatic discharge protection.” In contrast, the cited portion of Kodim (col. 9, line 9-13) merely discloses, as described in the Office Action, “in the transmit modes the low-power stage 16 is switched such that the signal output 26 of the multiband transformation stage 14 is coupled to the auxiliary port 62 which is terminated with a specific impedance.” Office Action, Page 4. Kodim explains that the “specific impedance” of the auxiliary port “is advantageous because it has been found that stop-band attenuation of the low pass filters 40, 42 arranged within the high-power stage 12 is effected by the impedance present at node 24.” Kodim, column 9, lines 13-16. This is simply a description of an impedance matching scheme, which is not related to electrostatic discharge protection, as recited in the claims. Therefore, Kodim does not disclose any type of electrostatic discharge protection. Accordingly, Applicant respectfully asserts that claim 9 is patentable over Kodim because Kodim does not disclose an adaptive filter “arranged to provide electrostatic discharge protection” as recited in claim 9.

CONCLUSION

Applicant respectfully requests reconsideration of the claims in view of the amendments and remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-3444** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-3444** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

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